



334403



River Center, 111 North Canal Street, 8th Floor, Suite 855,  
Chicago, IL 60606 • (312) 993-1067

TECHNICAL ASSISTANCE TEAM FOR EMERGENCY RESPONSE REMOVAL AND PREVENTION  
EPA CONTRACT 68-01-7367

Mr. Duane Heaton  
Deputy Project Officer  
Emergency Support Section, 5HS-11  
U.S. Environmental Protection Agency  
230 South Dearborn St.  
Chicago, IL 60604

November 14, 1989

TAT-05-G2-01464

Re: Clark Refinery Release Investigation, Blue Island, Illinois  
TDD# 5-8910-39

Dear Mr. Heaton:

On October 15, 1989, the U.S. Environmental Protection Agency (U.S. EPA) tasked the Technical Assistance Team (TAT) to respond to a reported gaseous chemical release at the Clark Oil and Refining Corporation (Clark), an active oil refinery, located in Blue Island, Illinois (Figure 1). The TAT and U.S. EPA had previously responded to a report of release at this same facility on July 17, 1989. This investigation is documented in the TAT letter report (TDD# 5-8907-21).

At 1100 hours TAT members Richard Mehl and Mary Therese Klemp arrived at the Clark facility, located near 131st Street and Kedzie Avenue. The wind was from the southwest, with gusts estimated at 20 miles per hour. Across from a Clark sign on the west side of the facility, a tri-tector was used to detect hydrogen sulfide ( $H_2S$ ) gas in the immediate vicinity of the plant. Sulfur-like odors were also detected downwind, east of the plant; no odors were detected upwind, south of the plant. The maximum concentration of  $H_2S$  detected was 0.3 parts per million (ppm) east of the plant, with background levels of 0 to 0.1 ppm. No levels of  $H_2S$  above background were detected south and west of the plant.

After performing air monitoring in the immediate vicinity of the plant, the TAT contacted On-Scene Coordinator (OSC) Bill Simes at 1140 hours and updated him on the status of the investigation. OSC Simes requested that the TAT perform air monitoring in the neighborhood northeast of the plant, where the complaints originated, and gave the TAT permission to interview Clark personnel.

**Roy F. Weston, Inc.**

**SPILL PREVENTION & EMERGENCY RESPONSE DIVISION**

In Association with ICF Technology Inc., C.C. Johnson & Malhotra, P.C., Resource Applications, Inc., Geo/Resource Consultants, Inc., and Environmental Toxicology International, Inc.

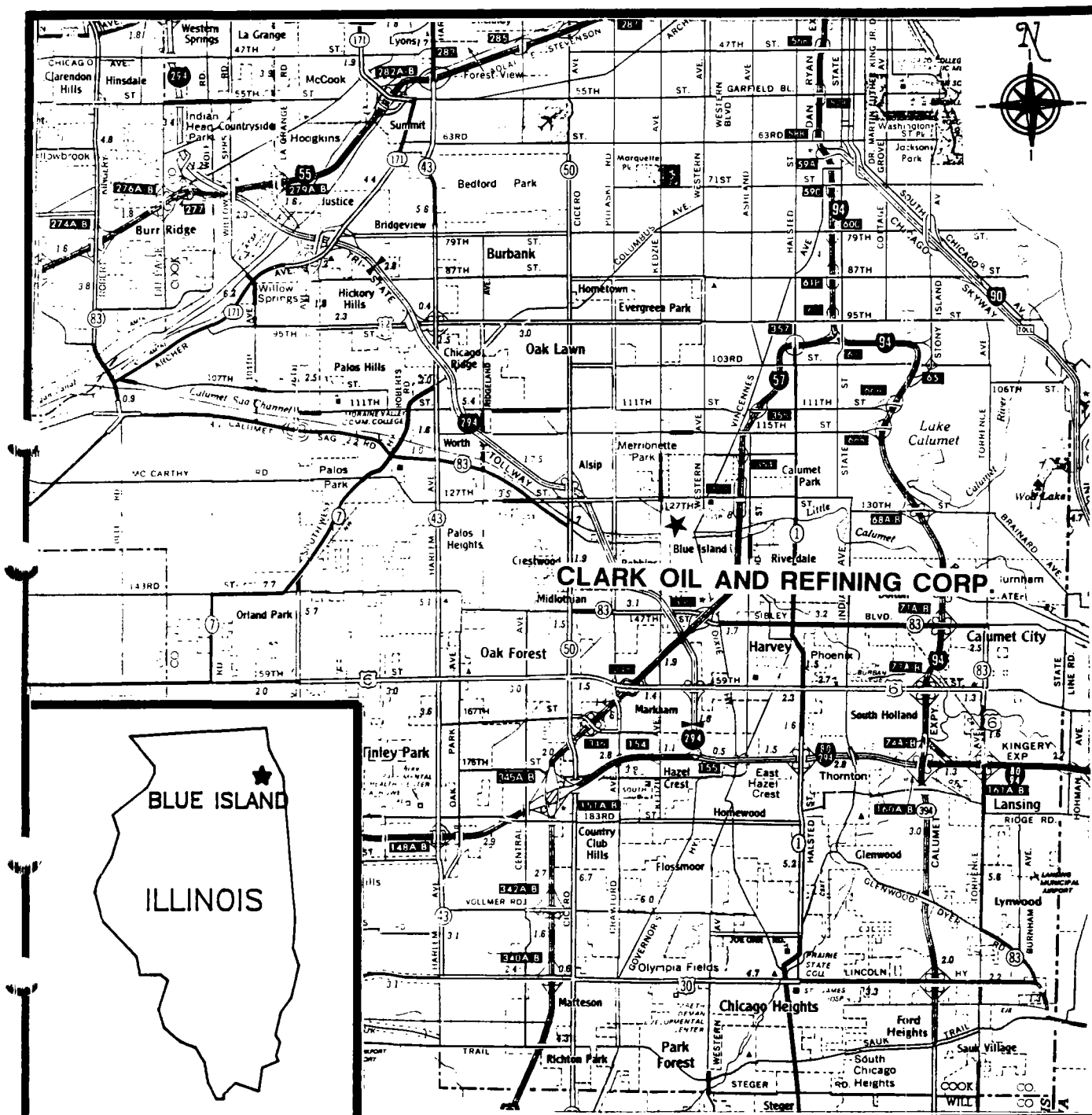


FIGURE 1  
SITE LOCATION MAP

CLARK OIL AND REFINING CORP.  
BLUE ISLAND, ILLINOIS

SCALE: 1 INCH = APPROX. 3.5 MILES  
SOURCE: STATE OF ILLINOIS OFFICIAL HIGHWAY MAP, 1989

**WESTON**  
MANAGERS DESIGNERS/CONSULTANTS

DRAWN BY  
T. KLEMP

DATE  
10-25-89

PCS #  
2463

APPROVED BY  
C. CARON

DATE  
10-25-89

TDD #  
5-8910-39

Mr. Duane Heaton

-3-

November 14, 1980

Between 1140 and 1230 hours, the TAT performed air monitoring in the neighborhood northeast of the facility, around 128th St. and Everett and 128th St. and Clinton. Organic vapors were monitored with a photoionization detector (HNU), sulfur dioxide gas (SO<sub>2</sub>) with Draeger detector tubes, and H<sub>2</sub>S was monitored with a tri-tector. Organic vapors ranged from 0.5 -1.0 units, with background level of 0.0 - 0.2 units; sulfur dioxide was not detected; and H<sub>2</sub>S levels ranged 0.2 - 0.3 ppm, with a background level of 0.0 - 0.1 ppm.

At 1200 hours the TAT proceeded to the Clark facility and interviewed shift foremen Jerry Kathcart and Al Legatzke. The foremen indicated that residents had complained to them about the sulfur-like smell, and that they (Clark) had subsequently performed an inspection of their scrubbers earlier that morning. They detected no evidence of a release. The foreman indicated that the plant uses a Klaus sulfur unit which converts H<sub>2</sub>S to liquid sulfur, utilizing an amine extractant. The foremen suggested that the source of the odors may be a nearby restaurant-oil reclaimer, located east of the plant.

At 1240 hours, the TAT proceeded to the east side of the Clark plant to observe the oil and grease reclaiming facility, TORVAC. According to a driver who was at the facility at the time, the company collects used restaurant grease from facilities such as Burger King. The TAT observed that signs on the trucks at the facility indicated permitting for special waste hauling.

On October 16, 1989, TAT member Mehl informed OSC Steve Faryan of the TAT observations at the site. On October 24, 1989, OSC Faryan informed the TAT that the Illinois Environmental Protection Agency was pursuing a possible enforcement action against the Clark facility for continuous release of pollutants, and that no further TAT involvement would be necessary.

WESTON • SPER

Mr. Duane Heaton

-4-

November 14, 1980

Should you have any questions or require additional information,  
please feel free to contact us.

Very truly yours,

ROY F. WESTON, INC.

*Chuck Canon*

*fr*

Mary Therese Klemp  
Environmental Scientist

*William R Doyle*

William R. Doyle  
Technical Assistance Team  
Leader, Region V

MTK:dn  
cc: S. Faryan, OSC